Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Beaverdam Investment Co.
   2982 Highway 96
   Burns, TN 37029

2. Type of action: Application to Change a Water Right 76H-30050211

3. Water source name: Groundwater, unnamed tributary to Robertson Creek, tributary to South Burnt Fork Creek, tributary to the Bitterroot River

4. Location affected by project: S2SW Section 32, T9N, R19W, Missoula County and NENE, E2NWNE, W2NWNE, NENENW Section 6, T8N, R19W, Missoula County

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

   This application proposes to permanently change the purpose and use for 32.8 gallons per minute (GPM) up to 20 acre-feet (AF) of Statement of Claim No. 76H-107787-00, and 21.3 GPM up to 13 AF for Statement of Claim No. 76H-107789-00, to operate seven offstream ponds for a new fishery purpose. The Applicant will construct four ponds in Section 32 (76H-107787-00) and three in Section 6 (76H-107789-00), all within the current place of use for each respective water right. The Applicant will permanently reduce irrigated acreage from 77 to 66.5 for water right 76H-107787-00 and from 62 to 46.5 for water right 76H-107789-00, removing 26 acres of grass hay production to account for one fill and annual evaporation from the ponds. The ponds will vary in size from 0.40 to 1.24 surface acres with a combined surface area of 4.56 acres and combined capacity of 18.24 AF. The Applicant will continue to flood irrigate 113 acres through use of existing ditch system and by releasing water from the ponds through newly constructed ditches.

   The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

Montana Natural Heritage Program	Species of Concern
Montana Department of Fish, Wildlife and Parks	2005 Dewatered Stream List
Montana Department of Environmental Quality	303(d) list of impaired streams
Montana Department of Environmental Quality	305(b) list of impaired streams

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity **-** *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

N/A: The source of water supply is groundwater, unnamed tributary to Robertson Creek.

Determination: No impact.

Water quality **-** *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

N/A: The source of water supply is groundwater, unnamed tributary to Robertson Creek.

Determination: No impact.

Groundwater **-** *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

The water rights proposed for change have groundwater, unnamed tributary to Robertson Creek listed as their source. This is not a new appropriation and timing of return flows from historic irrigation practices will be emulated through release of water from the westernmost Bitterroot Pond to mitigate potential impacts to adjacent surface water flows. The proposed project may contribute additional sediment during the construction phase, but will return to at or below historic levels of sediment once the ponds are established due to a reduction in irrigated acres and filtering action of the ponds.

Determination: No significant impact.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The source of water for the fish ponds and existing irrigation is an excavated drain ditch that collects groundwater from adjacent irrigated fields. The Applicant plans on constructing concrete check structures to divert water from the existing collection ditch system to both series of ponds. Each pond will have an inlet ditch sufficient in size to convey the flow rate needed for pond operation and field irrigation, and an earthen dam. One-foot Parshall flumes will be installed to record flow rates utilized in each system where water is diverted for irrigation

purposes. Irrigation will take place from both the existing collection ditch system and the ponds. Water will be diverted from the westernmost Bitterroot Pond through ditches directly to Sapiel and Robertson Creeks to ensure no adverse effect to existing water users due to changes in return flow volume and timing. The proposed project will result in minor disturbance to the ditch banks during construction of the check structures that may cause short term impacts to existing riparian vegetation growing in the drain ditch. The area will be revegetated after construction, or allowed to naturally revegetate upon completion of the project. The proposed check structures may create a barrier to fish migration; however, the source of water is a man made drain ditch that currently provides minimal cold water aquatic habitat. The use of this existing irrigation water right to fill recreational fish ponds will not alter groundwater levels in the project vicinity and will not affect well construction.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species *- Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

The Montana Natural Heritage Program was contacted to determine if there are any threatened or endangered fish, wildlife, plants, or aquatic species or any "species of special concern" that could be impacted by the proposed project.

In the vicinity of Section 32, T9N, R19W and Section 6, T8N, R19W, both in Missoula County, the Montana Natural Heritage Program identified the following animal species of concern: Great Blue Heron, Lewis's Woodpecker, Clark's Nutcracker, Bobolink, Westslope Cutthroat Trout, Bull Trout, and Western Spotted Skunk. No plant species were identified.

According to Montana Department of Fish, Wildlife, and Parks, the unnamed tributary (drain ditch) or Robertson Creek are not listed as core bull trout areas. Following pond construction and prior to stocking the ponds with fish, fish screens will be installed in both the north and south ditch systems that deliver water to the ponds and creeks to prevent fish ingress and egress. The ponds may provide habitat and a food source for Great Blue Heron, and increase habitat diversity on the Applicant's property that may benefit other avian species.

Determination: No significant impact.

Wetlands *- Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

N/A: This project does not involve any wetlands.

Determination: No impact

Ponds *- For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Applicant will submit an application to Montana Fish, Wildlife and Parks for a fish stocking permit following completion of the proposed ponds. Fish screens will be installed in both the north and south ditch systems that deliver water to the ponds and creeks to prevent fish ingress and egress, or entrainment of native cold water fish species. Waterfowl and wildlife could potentially utilize the ponds as a resource.

Determination: No impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Soils in the 139 acre historic place of use have been irrigated with this water right since 1896 and will not be degraded or altered by the change in point of diversion. They include Fairway-Grayhorse complex, Grayhorse-Haulings complex, and Grayhorse silt loam soil types and are not heavy in salts which can cause saline seep.

Determination: No impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Historically, water was delivered to the fields directly from the collection ditch system to flood irrigate the 139 acre place of use, allowing noxious weeds an opportunity to spread. The same irrigation method will be practiced on the remaining 113 acre place of use. The seven ponds will likely encourage establishment of hydrophytic vegetation; however, according to maps provided by the Montana Natural Heritage Program, various wetland cells already exist within and around the boundaries of the historic 139 acre place of use. There will be some soil disturbance during pond construction that could allow noxious weeds to become established if not seeded and reclaimed immediately after construction. However, the project is located entirely on private property and it is ultimately the landowner's responsibility to control noxious weeds on their property.

Determination: No significant impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Applicant will be using electricity to power an aeration system throughout winter months to prevent ice from forming on the surface of the ponds. Significant impacts to air quality will not occur as a result.

Determination: No significant impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

NA – project not located on State or Federal Lands.

Determination: No impact.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

None identified.

Determination: No impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

There are no locally adopted environmental plans or goals.

Determination: No impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed series of ponds are located entirely on private land owned owned by Beaverdam Investment Co. and therefore will not interfere with any recreational or wilderness quality or activity access.

Determination: No impact.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

No impacts to human health were identified.

Determination: No impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No _**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* None identified.

(b) *Local and state tax base and tax revenues?* None identified.

(c) *Existing land uses?* 26 acres will be removed from production and 4.55 of the 26 acres removed from production will be converted to two series of ponds.

(d) *Quantity and distribution of employment?* None identified.

(e) *Distribution and density of population and housing?* None identified.

(f) *Demands for government services?* None identified.

(g) *Industrial and commercial activity?* None identified.

(h) *Utilities?* None identified.

(i) *Transportation?* None identified.

(j) *Safety?* None identified.

(k) *Other appropriate social and economic circumstances?* None identified.

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: None identified

Cumulative Impacts: None identified

3. ***Describe any mitigation/stipulation measures:*** Applicant will reduce the place of use by 26 acres in order to offset consumptive use of the seven ponds. Applicant will also release water directly back into Robertson and Sapiel Creeks to mitigate for the loss of return flows with the discontinuation of irrigation on the 26 acres.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** No alternative identified.

PART III. Conclusion

1. Preferred Alternative: N/A

2 Comments and Responses: N/A

3. *Finding:*
*Yes___ No_**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action: AN EA IS THE APPROPRIATE LEVEL OF ANALYSIS FOR THIS PROPOSED ACTION BECAUSE NO SIGNIFICANT IMPACTS HAVE BEEN IDENTIFIED AS A RESULT OF THE PROPOSED ACTION.

Name of person(s) responsible for preparation of EA:

Name: Amy Groen
Title: Water Resource Specialist
Date: 11/23/2011